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Crabs of the Ogasawara Islands, V

A Collection Made by Dredging

By

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武田正倫*：小笠原諸島のカニ類，V．ドレッジにより得られたカニ類

As a part of the Natural History Research Project of the Japanese Islands by the National Science Museum, Tokyo, dredging operation to obtain benthic invertebrates was carried out at 18 stations ranging from 36 to 110 m off the northwest of Chichi-jima Island, in July 1976. Many stations covering the sea around Chichi-jima were first selected, but unfortunately, the expensive cost of chartering a fishing boat was unable us to actualize the plan. The bottom of the sea in question is in general so rocky for its most part that it seemed to be not appropriate for our primitive apparatus made by iron-frame with 90 cm wide, 20 cm high and 30 cm deep, but at any rate the 18 stations in the restricted area were successful in collecting the benthic animals, with 12 stations positive to crabs.

This paper deals with the crabs obtained, which were referred to 28 species of 9 families. Of them 5 species are new to science and 9 are new to Japanese waters, as listed below.

Leucosiidae	*Ebalia humilis* sp. nov.
	Praebebalia taeniata sp. nov.
	Oreophorus latus (BORRADAILE, 1903)
Majidae	*Oncinopus neptunus* ADAMS et WHITE, 1848
	Paratymolus bituberculatus HASWELL, 1880
	Aepinus indicus (ALCOCK, 1895)
	Hyastenus tenuicornis POCOCK, 1890
	Micippa parca ALCOCK, 1895
Parthenopidae	*Osachila expansa* sp. nov.
Portunidae	*Portunus macrophthalmus* RATHBUN, 1906
Xanthidae	*Xanthias cherbonnieri* GUINOT, 1964
	Actumnus setosiareolatus sp. nov.
	Planopilumnus pygmaeus sp. nov.
Ocypodidae	*Macrophthalmus telescopicus* (OWEN, 1839)

The author is deeply indebted to Mr. Yōji KURATA and other staff of the Ogasawara Fisheries Center for facilities of using the laboratory and various arrangements during this survey. Dr. Keiji BABA of Kumamoto University kindly identified the species of the Galatheidae, the knowledge of which was needed for consideration of the decapod crustancean fauna as a whole.

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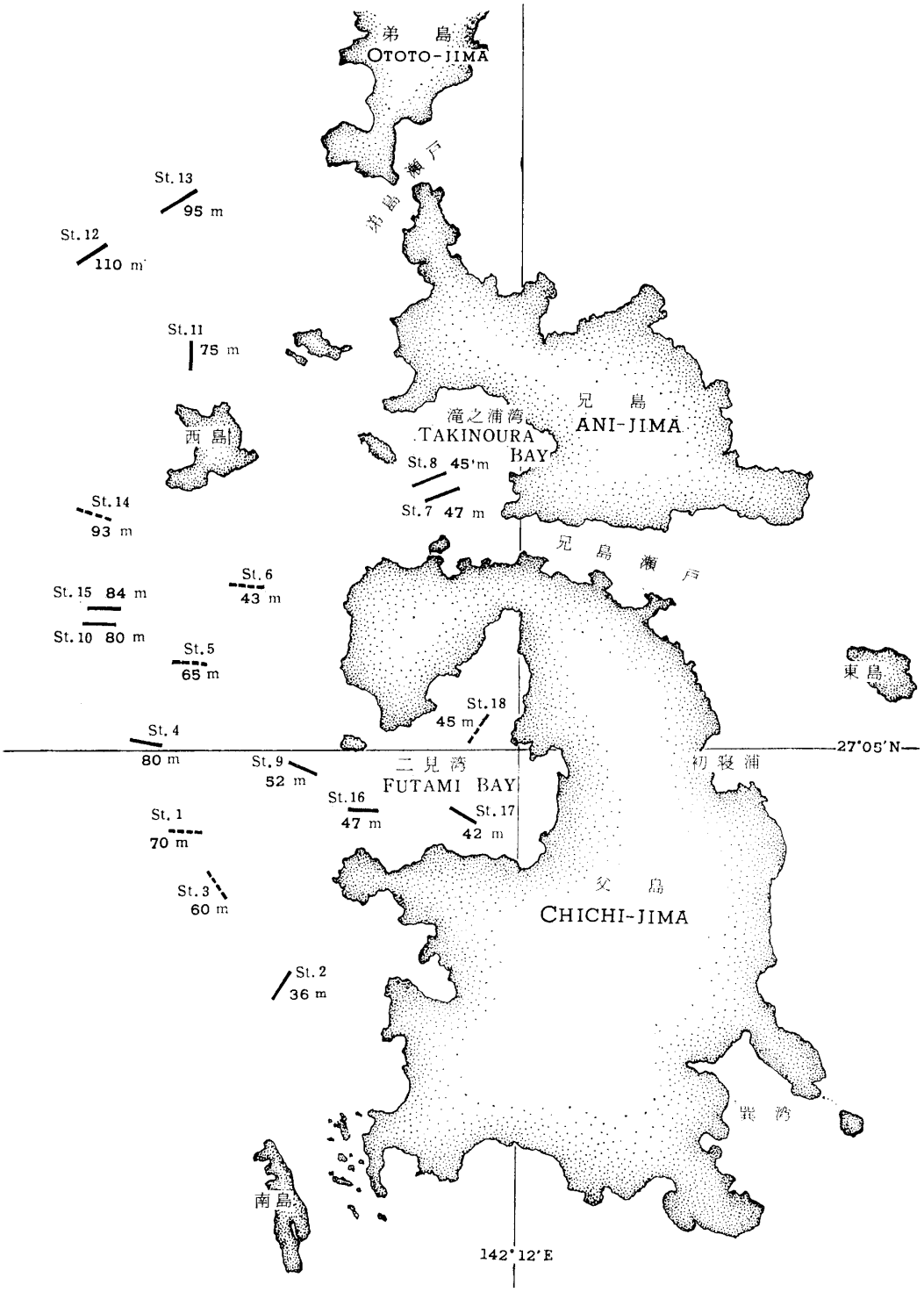

Fig. 1. Map of Chichi-jima and its associated islands, showing stations for dredging. Broken lines indicate stations negative to crabs.

Family Leucosiidae

Genus **Ebalia** Leach, 1817

151.[1] **Ebalia humilis** sp. nov.

(Figs. 2 A, B; 3 B-D)

St. 8–1 ♀, 2 juv. ♂♂, 1 juv. ♀ (paratypes, NSMT-Cr. 5490). St. 15–1 ovig. ♀ (holotype, NSMT-Cr. 5489). Breadth and length of carapace, 3.4 and 2.8 mm in holotype; 3.9 and 3.2 mm in female paratype; and 2.5 and 2.2 mm in largest juvenile paratype.

At a first glance this small species is similar to *Ebalia nana* Ihle from Sumbawa, Madura and Kei Island, 54–90 m deep, for its general contour of the carapace in the adult, but in that species the carapace is ill-defined only with weak indication of the hepatic and intestinal regions, and the chelipeds are unarmed at all. On the other hand, it may be closer to *E. sakaii* Takeda et Miyake from the Tsushima Straits, 125 m deep. In the latter species the carapace is uneven and much rougher with raised granules, the hepatic region is strongly developed so as to protrude as a conical tooth beyond the general controur of the carapace, the anterolateral, lateral and posterolateral parts of the carapace are distinctly angulated. The present comparative study revealed that the specimens at hand must be described as new to science. The description of the holotype is as follows.

"Carapace broader than long, with lateral expansions, being not so markedly convex; dorsum nearly smooth to unaided eye, but with enlargement quite thickly paved by minute, flat vesicular granules; regions barely traceable except for intestinal region which is moderately convex; a small prominence on protogastric part; median gastric and cardiac parts traceable, but not distinct, being shallowly separated from intestinal region; hepatic region indistinctly surrounded by a shallow wide depression, but not convex dorsally as well as laterally.

"Frontal region moderately raised and weakly convex dorsally, without median sulcas; its free margin nearly truncated in dorsal view, but on close examination median part very weakly concave, and in frontal view this concave median part perpendicularly deflexed as an anterior part of antennular septum, being not pointed distally.

"Antero-external end of buccal frame more or less angulated. Pterygostomial margin armed with a small conical protuberance. Margin between antero-external angle of buccal frame and pterygostomial protuberance more or less ridge-like and forms true margin of carapace in dorsal view. Margin behind pterygostomial protuberance weakly concave and then convex as anterior slope of lateral expansion of carapace; tip of lateral expansion convex, but not sharp; posterior slope of lateral expansion weakly concave, ending in a posterolateral dorsal convexity; margin behind this convexity about half the length of posterior slope of lateral expansion, being rapidly convergent. Anterolateral border of posterior margin of carapace nearly as long as margin behind the convexity mentioned

1) Registered number for the crabs of the Ogasawara Islands. The species new to the fauna in question are indicated by boldface.

above, directing toward epimeron; lateral end of posterior border rather rounded, and posterior border almost straight.

"Orbit shallow, with two supraorbital and one infraorbital small notches. Third maxilliped thickly covered with minute pearly granules; inner margin of ischium only slightly longer than merus, and slightly wider than exopod; a small protuberance at distal end of ischium, and a similar one at proximal end of merus; in natural position merus convex ventrally as a whole at its proximal half.

"Left cheliped, left second and fourth, and right third and fourth ambulatory legs missing. Right cheliped rather slender and wholly covered with vesicular granules so as to be somewhat scabrous. Merus armed with a conical tubercle at proximal one-third on

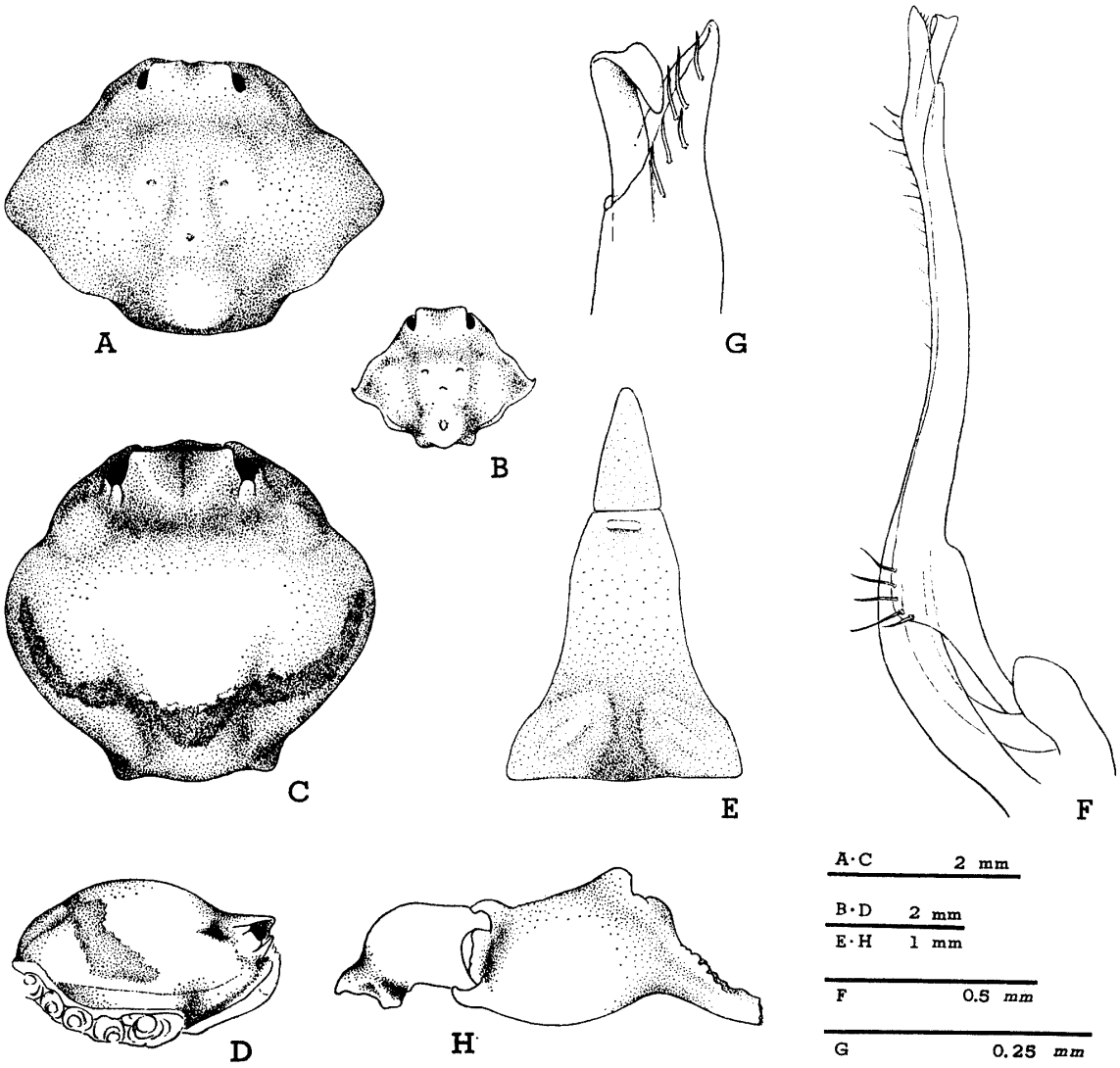

Fig. 2. A and B, *Ebalia humilis* sp. nov., ♀ (A) and juv. ♂ (B), paratypes, from St. 8. C-H, *Praebebalia taeniata* sp. nov., ♂ (C-G), holotype, from St. 13, and broken chela (H) from St. 15. C and D, carapace in dorsal and lateral view, respectively. E, abdomen. F and G, left first and second pleopods in ventral and sternal view, respectively.

anterior margin and three at median part on posterior margin, and distal end of posterior margin weakly angulated. Carpus small and weakly convex at the middle of outer margin. Palm moderately inflated proximally, with a longitudinal shallow furrow along outer margin. Fingers as long as palm and straight, but immovable finger not in a straight line with palm; cutting edges minutely, sharply and irregularly toothed throughout their length.

"Ambulatory legs slender, roughly granulated and more or less scabrous except for dactyli, being unarmed at all. In each pair dactylus as long as propodus. Only three pieces of abdomen observable; first linear segment may be hidden under carapace; terminal

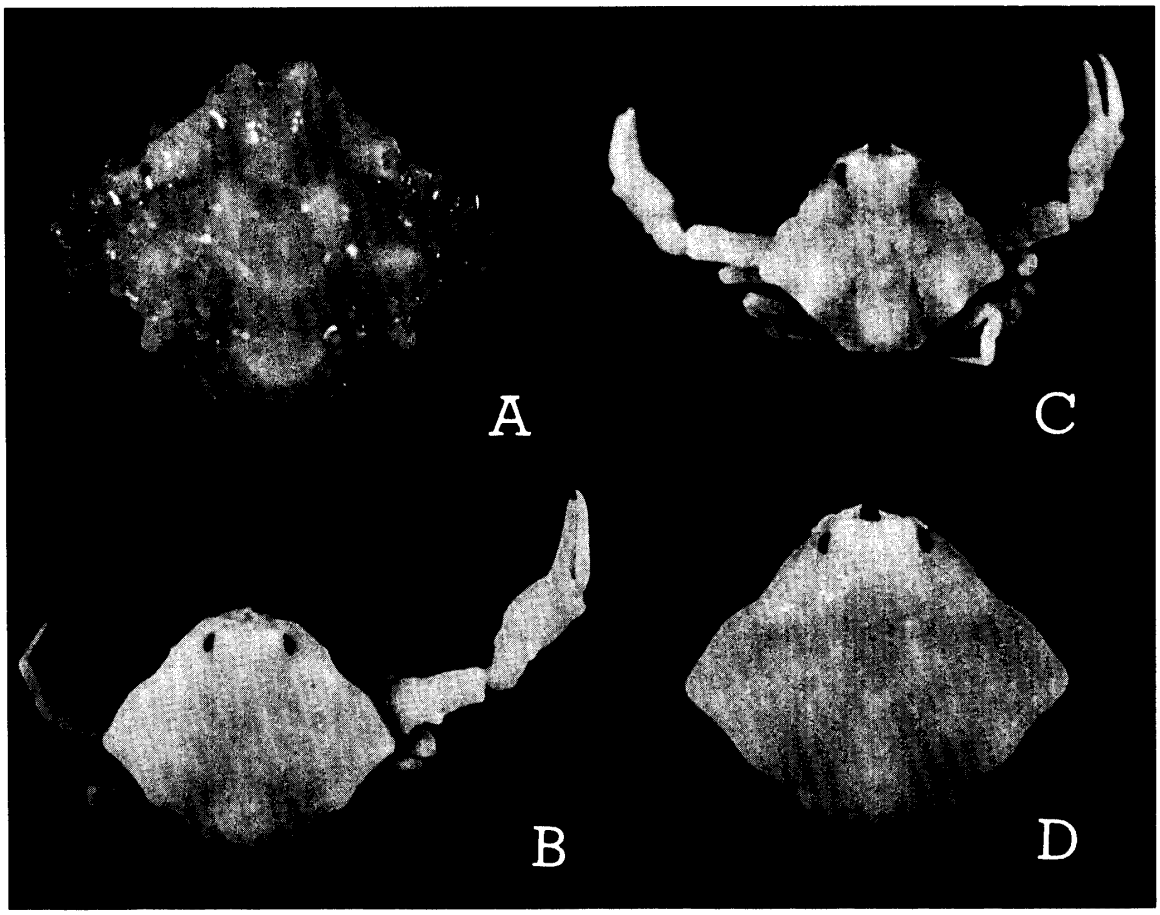

Fig. 3. A, *Ebalia hayamaensis* SAKAI, carapace from St. 13. Breadth of carapace, 6.0 mm. B-D, *Ebalia humilis* sp. nov., ovig. ♀ (B), holotype, from St. 15, and juv. ♂ (C) and ♀ (D), paratypes, from St. 8. Breadth of carapace, 3.4 mm (B), 2.5 mm (C) and 3.9 mm (D).

segment more or less oblong, with subacute apex, nearly reaching tip of sternum between third maxillipeds of both sides".

Unfortunately, all the chelipeds and ambulatory legs are missing in the female paratype which is larger than the holotype. In general the carapace agrees with that of the holotype, but a minute protuberance is traceable at the posterior part of the median gastric region, and the antero-external part of the buccal frame and the pterygostomial margin are not angulated at all.

In each of the juvenile specimens, the carapace is uneven with the more accentuated prominences. In the female two protogastic and one median gastric prominences are rather tuberculated. In the female and the smaller male, but not in the larger male, an additional prominence is present on the branchial region, and on the contrary a prominence is present on the intestinal region in the larger male, but not in the female and the smaller male. In all the juvenile specimens the hepatic margin is more or less ridge-like, but not protruded beyond the angulated pterygostomial margin in dorsal view. In the female and the smaller male the lateral expansion is rather angulated as in the adult, but that of the larger male is sharper and armed with a spinule which is curved dorsally. The male abdomen is comparatively wide, with four pieces; a transverse prominence at the fused segment is very small; the terminal segment is not long, being about one-fourth the length of the fused segment. The first and second male pleopods may be not fully developed, but the second is without doubt filiform and longer than the first.

In life, the carapace, chelipeds and ambulatory legs are entirely white except for the smaller juvenile male which is brownish.

Genus **Praebebalia** RATHBUN, 1911

152. Praebebalia taeniata sp. nov.

(Figs. 2 C-H; 4 A)

St. 13–1 ♂ (holotype, NSMT-Cr. 5491). Breadth and length of carapace, 3.9 and 3.9 mm.

The genus *Praebebalia* is represented by five species, viz., *P. extensiva* RATHBUN, 1911 from the western Indian Ocean, 60–225 m deep, *P. pisiformis* IHLE, 1918 from the Samau Straits, 390 m deep, *P. sikokuensis* (YOKOYA, 1933) from Tosa Bay, 344 m deep, *P. longidactyla* YOKOYA, 1933 from Japan and the East China Sea, 123–190 m deep, *P. mosakiana* SAKAI, 1965 from Sagami Bay and Tosa Bay, 65 m deep, and *P. elongata* ZARENKOV, 1969 from New Ireland, 450 m deep.

In the specimen at hand, unfortunately, all the chelipeds and ambulatory legs are missing, but the carapace is different from those of the known species. Fortunately, however, it is a male specimen, so that the new name was given to it. The new species is similar to *P. pisiformis* and *P. longidactyla* which are close to each other. The former is known only by a female, but the latter was well redescribed by TAKEDA and MIYAKE (1970). The new species differs from *P. pisiformis* in having the prominently wider front with the opened deeper orbits and in that the merus of the third maxilliped is just as long as the ischium, and from *P. longidactyla* in having the bulged branchial regions of both sides, the distinctly narrower male abdomen and the shorter second male pleopod. The following is the description of the holotype.

"Carapace globular and as long as wide. Dorsum ill-defined only with low prominences at hepatic and intestinal regions, being thickly and uniformly covered with microscopical granules. Fronto-orbital margin raised. Front comparatively wide, and its

lateral ends angulated and directed obliquely upward; median notch not distinct, and median dorsal longitudinal sulcas shallow; in dorsal view free margin of each lobe only widely convex just near median notch and feebly concave in the middle; in frontal view median part of front perpendicularly or more strongly directed downward as an anterior part of antennular septum; dorsal surface of front oblique toward a weak oblique ridge running from lateral end of free margin to median posterior part. Inner part of supraorbital border long and only weakly concave near lateral end of front; a supraorbital median lobe with convex margin formed by two small V-shaped notches followed each by a long slit; external orbital lobe prominent and more or less cupped; infraorbital lobe large and truncated along its outer margin, being separated from external orbital lobe by a deep V. Pterygostomial region and anterior margin of buccal frame visible from above beyond hepatic region and front, respectively. Third maxilliped convex at junction of ischium and merus; ischium and proximal half of exopod without distinct granules, but merus and distal half of exopod with microscopical pearly or rather conical granules; inner margin of merus as long as that of ischium; distal end of inner margin of merus sharply angulated, with nearly truncated and feebly convex outer margin; exopod as wide as ischium and merus. Male abdomen with four pieces; fused segment proximally with a low prominence at each side and distally with a median transverse ridge; terminal segment tapering and sharply pointed at its distal end, being about half the length of fused segment".

In spirit, the carapace is right brown and ornamented with a broad band of darker color along the branchial margins across the intestinal region. This color band may be characteristic of this species.

Genus **Oreophorus** Rüppell, 1830

153. **Oreophorus (Oreotlos) latus** (Borradaile, 1903)

(Pl. 1 C)

St. 7–1 ♂ (NSMT-Cr. 5492). St. 9–1 ovig. ♀ (NSMT-Cr. 5493). Breadth and length of carapace, 9.0 and 5.9 mm in ovigerous female.

The male specimen is somewhat young, but the ovigerous female agrees with the original figure except for having the uneven lateral borders of the carapace. This species is similar to *O. latusoides* Sakai from the northwest of Kyushu, but the carapace is much wider with proportion between the length and width being 1:1.5, the front is not strongly developed, and the pterygostomial margin is more or less angulated.

This species has hitherto been known from Male and North Male Atolls in the Maldive Archipelago, 65 m deep (Borradaile, 1903), north of Waigeu in the Malay Archipelago, 83 m deep (Ihle, 1918), and south coast of Molokai Island and the Auau Channel, 40–65 m deep (Rathbun, 1906) and Laysan Island (Edmondson, 1925) in the Hawaiian Islands. In addition to the specimens from the Ogasawara Islands, the present author examined a male from Kuroshima Island, the Ryukyu Islands, which was collected by the author himself at the lower coral reef. An ovigerous female from Aberdeen Bay in the Nicobar

Islands recorded by SANKARANKUTTY (1962) seems to be related to *Tlos havelocoki* LAURIE, since the anterolateral part of the carapace is markedly flat or rather sunken with the margin turned up.

In revising the genus, the following short notes are presented. GUINOT (1966), who shifted *Osachila* STIMPSON and *Actaeomorpha* MIERS to the Aethrinae of the Parthenopidae, suggested that four species and one subspecies hitherto referred to *Actaeomorpha* are closely related to *Oreophorus*. Although some important contributors such as IHLE (1918), SAKAI (1937) and SERÈNE (1954) considered that *Oreophorus* is subdivided into three subgenera, *Oreophorus* s.s., *Tlos* ADAMS et WHITE and *Oreotlos* IHLE. Recently SAKAI (1976) dealt with *Tlos* as a distinct genus due to having the characteristic anterolateral part of the carapace. At present, therefore, the genus *Oreophorus* is subdivided into two subgenera, viz., *Oreophorus* with a deep groove along the margin and *Oreotlos* without groove. The present author agrees with this result. Four species and one subspecies excluded from *Actaeomorpha,* viz., *aglypha* (LAURIE, 1906), *aglypha angulata* IHLE, 1918, *lapillula* ALCOCK, 1896 and *sculpta* (HASWELL, 1879), are not always well applied to the two subgenera, even if they are closer to *Oreophorus* than to *Oreotlos*. As SAKAI (1976) decidedly treated *morum* as *Oreophorus* (*Oreophorus*), the others must be similarly included in the genus *Oreophorus,* though there remains the possibility of establishment of a new subgenus. Apart fromt his problem, as TAKEDA (1973) mentioned, if they are referred to *Oreophorus,* the subspecies originally described as *Actaeomorpha aglypha* var. *angulata* by IHLE (1918) must be renamed, since there is already *Oreophorus angulatus* (RATHBUN, 1906). This subspecies from Banda, 9–36 m deep, seems to be specifically distinct, but at the present state a merely substitute name, ***Oreophorus* (*Oreophorus*) *aglyphus ihlei*** nom. nov., is proposed.

Genus **Philyra** LEACH, 1817

154. Philyra syndactyla ORTMANN, 1892

(Pl. 2 A)

St. 2–1 ♂ (NSMT-Cr. 5494). St. 9–5 ♂♂, 11 ♀♀ (NSMT-Cr. 5495).

Known from Japanese waters from Hokkaido to Kyushu, and also from southeast coast of Korea, ranging to a depth of 30 m.

Family M a j i d a e

Genus **Oncinopus** DE HAAN, 1839

155. Oncinopus neptunus ADAMS et WHITE, 1848

(Pl. 1 A)

St. 9–1 ♂ (NSMT-Cr. 5496). Length and breadth of carapace, 7.2 and 5.0 mm.

The genus *Oncinopus* is now considered to comprise three species. In Japanese waters, *O. aranea* (DE HAAN) and *O. angustifrons* TAKEDA et MIYAKE are known, and here

the third species was recorded for the first time. The discrimination of this species from *O. angustifrons* is not difficult due to the characteristic formation of the front in the latter species, but it seems to be not easy to distinguish the female of this species from *O. aranea*. In general, however, the front is narrow and considerably tapering in *O. aranea,* while in this species the frontal lateral margins of both sides are subparallel to each other. The ambulatory legs of this species are shorter and stouter. The male first pleopod of each species is the most remarkable distinguishing feature as represented by TAKEDA and MIYAKE (1969).

Hitherto known from the South China Sea off the Philippines to Australia, and to East Africa and the Red Sea. From 50 to 90 m deep. In addition to the specimen from the Ogasawara Islands, the present author examined a female from off Iriomote Island, the Ryukyu Islands, which was collected by Mr. K. SUZUKI of Tokai University.

Genus **Paratymolus** MIERS, 1879

156. **Paratymolus bituberculatus** HASWELL, 1880

(Pl. 1 B)

St. 9–1 ♀ (NSMT-Cr. 5497). Length and breadth of carapace, 4.7 and 4.0 mm.

This species differs from *P. pubescens* MIERS in contour of the carapace and armature of the chelipeds. On comparison with males at hand of *P. pubescens,* the following notes on this female are presented. The carapace is nearly naked and distinctly broader, its anterior part in front of the gastric tubercles being sunken somewhat like in another congener, *P. sexspinosus* MIERS. The anterior end of the supraocular eave is strongly tuberculated. The posterior hepatic tooth is more prominent, rather depressed and directed obliquely forward, while a branchial marginal tubercle is very small. The merus of the cheliped is armed with three tubercles on its lower border instead of rudimentary ones with one or two setae in *P. pubescens*. The carpus bears a curved long spine at its inner angle as usual, but some additional tubercles are present on the outer surfaces of the carpus and palm, viz., two each on the carpus and palm. In addition, the upper border of the palm is terminally produced into a strong tubercle.

As ORTMANN (1893) remarked on *P. pubescens* that the male carapace is not distinctly deflexed anteriorly as in the female, some features mentioned above are to be referred to the female. However, the differences of the cheliped seem to be specific. Although in the original and subsequent descriptions (1880, 1882) and in the key made by GRIFFIN (1966) the merus of the cheliped is said to be armed with four spines, it may be not appropriate to think this armature as the distinguishing feature.

Hitherto known only from the Torres Straits and Queensland, but the female figured by SAKAI (1965) as *P. pubescens* seems to be referable to this species. A shallow water inhabitant. In addition to the specimen from the Ogasawara Islands, the present author examined a male from off Tanega-shima Island, southewest Japan, which was collected by dredging at a depth of about 50 m.

Genus **Achaeus** LEACH, 1817

157. Achaeus fissifrons (HASWELL, 1879)

St. 9–1 ♀ (NSMT-Cr. 5498). St. 12–1 ♂ (NSMT-Cr. 5499).

This species was very elaborately redescribed by GRIFFIN and YALDWYN (1965), and GRIFFIN (1966, 1970 b).

Known from Japan, Australia, New Zealand and the Iranian Gulf. In Japan it has hitherto been known only from Sagami Bay. From 10 to 145 m deep.

Genus **Aepinus** RATHBUN, 1897

158. Aepinus indicus (ALCOCK, 1895)

(Fig. 4 B)

St. 10–1 ♂ (NSMT-Cr. 5500).

This specimen is small, only with 4.5 mm in median line of the carapace, and unfortunately, all the ambulatory legs are missing. At first sight, there is an unexpected, surprising similarity to the *Menaethiops* species in the general formation of the carapace and chelipeds, but it is readily distinguished from them by having the rostrum formed of two divergent knobbed spines. There is little doubt about the identification of this specimen due to the important contributions by the original author, GRIFFIN (1972, 1974), and GRIFFIN and TRANTER (1974), but it is not always sure about the generic identity with the Atlantic representative, *A. septemspinosus* (A. MILNE EDWARDS), as shortly mentioned by GRIFFIN (1974).

Hitherto recorded from the Sulu Sea to Australia, and through several localities in the Indian Ocean to East Africa and the Red Sea. From 47 to 300 m deep, except for a record at coral reef by LAURIE (1906). In addition to the small specimen from the Ogasawara Islands, the present author examined some good specimens from off Tanega-shima Island, shouthwest Japan, which were collected by dredging at a depth of about 50 m.

Genus **Hyastenus** WHITE, 1847

159. Hyastenus tenuicornis POCOCK, 1890

(Pl. 2 C, D)

St. 9–1 ovig. ♀ (NSMT-Cr. 5501). St. 10–1 ovig. ♀ (NSMT-Cr. 5502). Length of carapace in median line and breadth excluding branchial spines, 7.8 and 5.6 mm, and 7.6 and 5.3 mm.

These specimens agree well with the descriptions made by the original author, ALCOCK (1895) and EDMONSDON (1951). This small species with the slender chelipeds and ambulatory legs is most characterized by the enormous length of the rostral spines and the curious form of the supraocular eave and postocular lobe. The rostral spines are long, straight

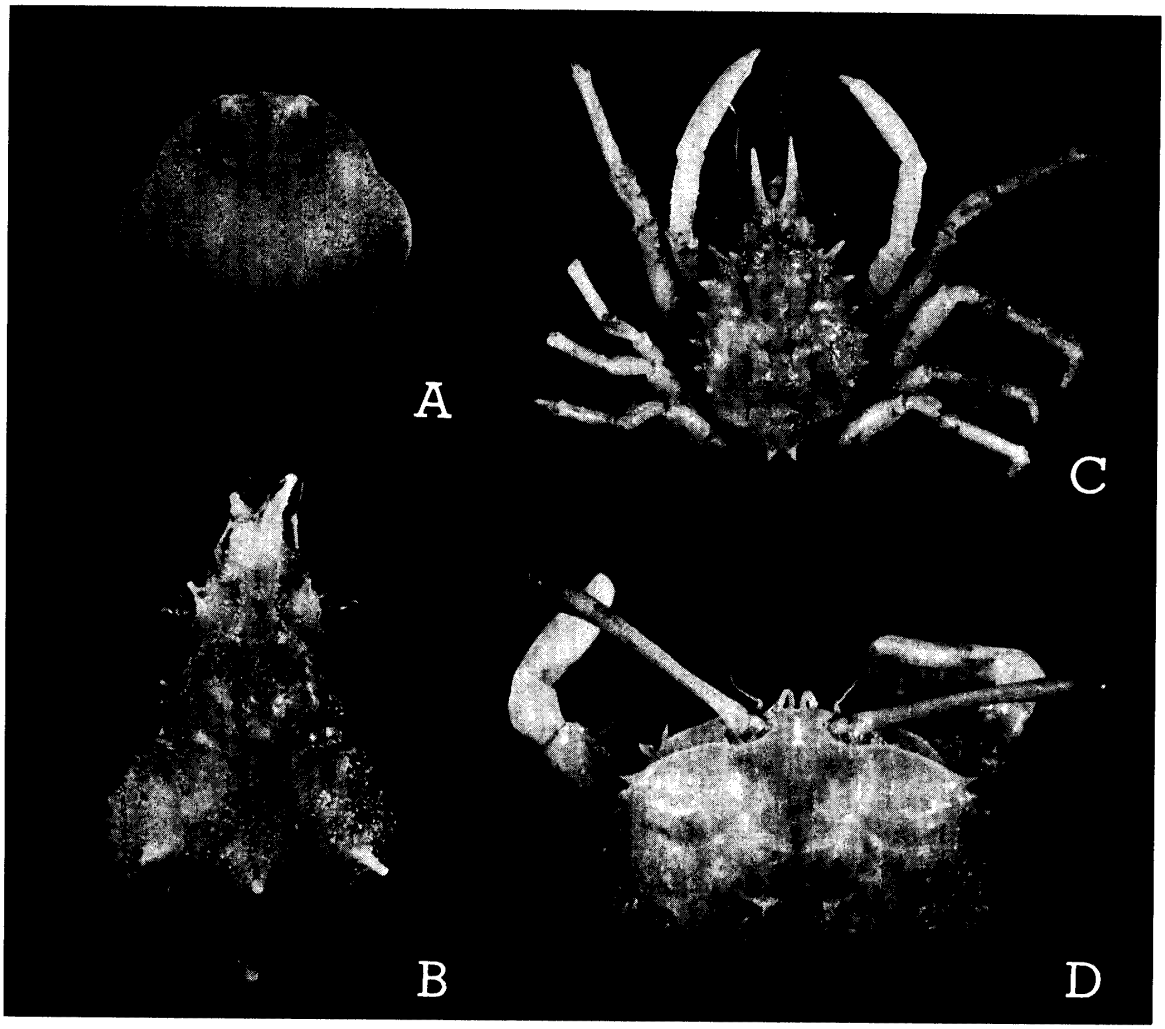

Fig. 4. A, *Praebebalia taeniata* sp. nov., ♂, holotype, from St. 13. Breadth of carapace, 3.9 mm. B, *Aepinus indicus* ALCOCK, ♂ from off Tanega-shima I., southwest Japan. Breadth of carapace without branchial spines, 5.6 mm. C, *Schizophroida simodaensis* SAKAI, ♂ from Miyanohama, Chichi-jima I. Breadth of carapace without branchial spines, 10.8 mm. D, *Macrophthalmus telescopicus* (OWEN), ♂ from St. 17. Breadth of carapace, 10.4 mm.

and strongly divergent from the bases, being slightly directed downward. In males the rostral spines are said to reach nearly twice the carapace length, while in the females at hand they are subequal to, or only slightly exceed, the length of the carapace proper. The postocular lobe is distinctly cupped to receive the cornea, consisting of a stout stalk and a compressed crown. The supraocular eave is prominent, with the anterior angle produced forward and upward, and with the sharp posterior angle directed toward the postocular lobe. The antennal basal segment is, as skillfully described by ALCOCK (*op. cit.*), deeply grooved longitudinally and armed with a strong spine at its antero-external angle, its outer border bearing two teeth. The antero-external angle of the buccal cavern is lamellate, and the pterygostomial region is armed with a truncated tubercle.

Hitherto known from the Seychelles, Amirantes and Chagos Archipelagoes in the

western Indian Ocean, off Sri Lanka and Lower Burma in the Bay of Bengal, Macclesfield Bank in the South China Sea, and the Hawaiian Islands. From 15 to 320 m deep.

Genus **Eurynome** LEACH, 1815

160. Eurynome orientalis SAKAI, 1961

St. 12–1 ♀ (NSMT-Cr. 5503).

Hitherto known from Sagami Bay (SAKAI, 1961, 1965, 1976), the East China Sea (TAKEDA and MIYAKE, 1972) and Western Australia (GRIFFIN, 1970 a). From 65 to 130 m deep.

Genus **Schizophroida** SAKAI, 1933

161. Schizophroida simodaensis SAKAI, 1933

(Fig. 4 C)

St. 9–4 juv. (NSMT-Cr. 5504). St. 10–1 juv. ♂ (NSMT-Cr. 5505).

These juvenile specimens were compared with an adult male from Miyanohama, Chichi-jima Island, collected by SCUBA diving.

Endemic to Japanese waters. Hitherto known from Sagami Bay to the vicinity of Kii Peninsula. From 10 to 50 m deep.

Genus **Micippa** LEACH, 1817

162. Micippa parca ALCOCK, 1895

(Pl. 2 B)

St. 9–1 ovig. ♀ (NSMT-Cr. 5506). Length of carapace in median line, 7.5 mm, and breadth excluding branchial spines, 5.8 mm.

This species is really similar to *M. margaritifera* HENDERSON, as originally described as its variety. The carapace is less granular, a group of spinules occupies the median part of the posterior border of the carapace instead of a round tubercle, and the ambulatory meri are more strongly foliaceous. In life, this specimen was entirely brick red.

Hitherto known from the Andamans (ALCOCK, 1895) and Hawaii (EDMONDSON, 1951). From 30 to 45 m deep.

Family P a r t h e n o p i d a e

Genus **Aulacolambrus** PAULSON, 1875

163. Aulacolambrus diacanthus (DE HAAN, 1839)

(Pl. 2 G)

St. 9–1 ♀ (NSMT-Cr. 5507).

A small species, ranging from Tokyo Bay to the Philippines, and through several localities in the Indian Ocean to the Red Sea. From 30 to 75 m deep.

Genus **Osachila** STIMPSON, 1871

164. **Osachila expansa** sp. nov.

(Pl. 3; Pl. 6 A)

St. 10–1 ♀ (holotype, NSMT-Cr. 5508). Breadth and length of carapace, 13.8 and 11.0 mm.

The genus *Osachila* is represented by eight species from America, one from West Africa and two from Japan. Its relation to some allied genera were extensively discussed by GUINOT (1966, 1967), though a slight doubt remains as for the generic identity of the West Africa and Japanese species with the American representatives. In the latter inclusive of the type-species, *O. tuberosa* STIMPSON, the buccal cavern is so pointed anteriorly that the efferent branchial orifices of both sides approach to each other, and thus each merus of the third maxillipeds is sharply pointed at the distal extremity. Contrary to this, in the Japanese and West African species, the anterior extremity of the buccal cavern is truncated and the efferent branchial orifices are separated by a median ridge, and in accordance with this feature the distal extremity of each merus is divided into two small processes. Although the knowedge of the male abdomen is, unfortunately, absent from the Japanese species, it is said that the male abdomen is seven-segmented in the West African species instead of five segments in the American species.

In the female specimen at hand, the buccal cavern is so narrowed anteriorly that each merus of the third maxillipeds are sharply pointed distally like the American species. It represents a new species, being readily distinguished from all the known species by the shape of the carapace expanded posterolaterally. The description of the holotype is as follows.

"Carapace quadrilateral with protruded frontal region, its dorsum being uneven, indistinctly rugose or reticulated; protogastric regions markedly convex, high and more or less reticulated with irregular ridge-like elevations; median gastric region low, but medially traversed by a short ridge with indistinct two tubercles; cardiac region deeply separated from median gastric region, and only weakly convex, with reticulation and microscopical pits; a small tubercle at some distance from lateral end of cardiac region, and a similar but slightly larger one obliquely behind the said tubercle and cardiac region; intestinal region not demarcated, but only sunken; hepatic region nearly smooth, and widely and deeply sunken; a prominent protuberance with reticulation at anterior branchial region; antero-inner part of anterior branchial region prolonged toward posterior part of protogastric protuberance as an indistinct ridge; posterior branchial region irregularly reticulated, with three low protuberances which are obliquely separated by smooth shallow furrows.

"Front strongly developed as two convexities. Anterior part of lateral border of carapace thin, weakly curved upward and armed with four lobes behind a weak concavity next to external orbital angle; these lobes contact with each other, only leaving three narrow slits;

border of each lobe again subdivided into three concal teeth, median one of which are the largest. Posterior part of lateral border remarkably expanded as a thin lobe, its upper surface, or outer surfaces of posterior branchial protuberances, curving downward and its lower surface being deeply excavated for reception of ambulatory legs; on a close examination three equidistant closed sutures traced.

"Both chelipeds stout and equal in size. Merus smooth and concealed beneath carapace; its upper border nearly truncated throughout its length, and thus two weak ridges formed; its outer lower border bears two subdistal conical teeth, border between them being concave to receive in natural position first tooth of lower border of palm. Carpus enlarged, smooth on its inner surface, and roughly and irregularly reticulated or eroded on its outer surface; its inner angle sharply angulated. Palm high, roughly reticulated or eroded with some long longitudinal and many short transverse ridges; several small tubercles on longitudinal ridges; upper border sharp and armed with two conical teeth, and its distal end also produced to a similar tooth; lower border thin and cut into three conical teeth. Immovable finger broad and ornamented with two longitudinal ridges, its lower border being cut into three low teeth. Movable finger rather slender, and its proximal end of upper border angulated. Cutting edges of both fingers regularly toothed with several conical teeth throughout their length.

"Ambulatory legs distinctly depressed and reduced their length from first to fourth. Merus smooth for its most part, but places near crests on posterior upper and lower borders ornamented with pits of various size; a remarkable thin crest developed on anterior border, being reinforced by several transverse ridges; margin of crest nearly entire, but in first two pairs their proximal halves more or less irregular each with two or three setae. Upper surface of carpus pitted and divided into two by a longitudinal ridge; anterior part of upper surface markedly roughened and more or less reticulated; anterior border sharp, and its distal end produced into a conical tooth. Both borders of propodus sharp and ornamented with pits of various size; in first two pairs each upper border cut into three teeth including distal one, and proximal part of posterior border with a tooth-like expansion, while last two pairs with these features of weak development; upper surface markedly uneven with about three longitudinal ridges. Both borders of dactylus also thin with two prominent teeth on anterior border and one on posterior border; upper surface ornamanted with two ridges, viz., dentate anterior one with three or four teeth and non-dentate posterior one; posterior ridge ill-developed in last pair, but anterior dentate ridge always strong; terminal horny claw very small".

In life, the holotype was entirely creamy white.

Family A t e l e c y c l i d a e

Genus **Kraussia** DANA, 1852

165. Kraussia integra (DE HAAN, 1835)

St. 7–1 ♀ (NSMT-Cr. 5528).

Distinction of this species and its close congener, *K. truncatifrons* SAKAI should be referred to SAKAI (1976).

Chiefly West Pacific from Tokyo Bay to Rotuma Island in the South Pacific, and otherwise known from the Andamans. Usually found in sand and under stones or pebbles at intertidal zone.

Family P o r t u n i d a e

Genus **Libystes** A. MILNE Edwards, 1867

26. **Libystes lepidus** MIYAKE et TAKEDA, 1970

(Pl. 4 A, B)

St. 17–2 ♂♂, 1 ovig. ♀ (NSMT-Cr. 5529). Breadth and length of carapace, 11.5 and 7.2 mm, 9.5 and 6.0 mm in males, and 11.8 and 7.4 mm in ovigerous female.

This species originally reported from Futami Bay, Chichi-jima Island was subsequently recorded at Timor by STEPHENSON (1975). Among the specimens at hand, one of the males and the ovigerous female well agree with the original description in having four minute conical anterolateral teeth, but in another male, which is the largest of the specimens examined, the anterolateral teeth are obsolete, though traceable as the irregular margin of the carapace. Considering this respect and the shape of the male first pleopod, the validity of this species may be doubted, but in the close congener, *L. nitidus* A. MILNE EDWARDS, the carapace is broader and its anterolateral border is always thick and entire.

As pointed by STEPHENSON (*op. cit.*), SERÈNE (1966) decidedly synonymized *L. villosus* RATHBUN with *L. nitidus,* but MIYAKE and TAKEDA (1970) retained it as a separate species without discussion. Their separation was based on *L. villosus* having more hairy legs and also having thickly granulated anterolateral areas of the carapace. At present are one male and six females from Futami Bay collected by Mr. Y. KURATA, which were identified with *L. villosus.* They are seemingly close to *L. nitidus,* but the anterolateral, frontal and epimeral surfaces, the chelipeds and the ambulatory legs are markedly hairy. The male first pleopod is stout and similar to the figures 1–4 of SERÈNE (*op. cit.*), which were referred to those of the juveniles of *L. nitidus.* This fact may indicate that *L. villosus* known from Samoa, Hawaii and Japan is valid, and that some specimens dealt with by SERÈNE as *L. nitidus* really represent this species. **166. Libystes villosus** RATHBUN, 1924, is new to the Ogasawara Islands. The following key replaces that of STEPHENSON (*op. cit.*).

Key to the species of *Libystes* A. MILNE EDWARDS

1. Anterolateral border bearing teeth..... 2
– Anterolateral border entire, without teeth (dactyl of fifth leg narrow and curved)..... 4
2. Anterolateral border with 5 teeth (including extra-orbital angle), front curved..... 3
– Anterolateral border with 6 or 7 teeth, front straight (dactyl of fifth leg broad)...
..... *L. edwardsi* ALCOCK

3. Dactyl of fifth leg broad.....*L. paucidentatus* STEPHENSON et CAMBELL
– Dactyl of fifth leg narrow and sinuous.....*L. lepidus* MIYAKE et TAKEDA
4. Carapace nearly naked..... 5
– Anterolateral, frontal and epimeral areas markedly hairy.....*L. villosus* RATHBUN
5. Carapace elliptical.....*L. nitidus* A. MILNE EDWARDS
– Carapace subquadrilateral.....*L. alphonsi* ALCOCK

Genus **Portunus** WEBER, 1795

167. **Portunus (Monomia) haanii** (STIMPSON, 1858)

St. 2–2 juv. (NSMT-Cr. 5530). St. 7–1 ♂, 4 juv. (NSMT-Cr. 5531). St. 8–3 juv. (NSMT-Cr. 5532). St. 9–1 juv. (NSMT-Cr. 5533).

This species previously known as *P. gladiator* FABRICIUS is not uncommon in Japanese waters. According to STEPHENSON and COOK (1973), the species normally regarded as *P. gladiator* is synonymized with *P. sanguinolentus* (HERBST), while *P. pseudoargentatus* STEPHENSON is a synonym of this species, and *P. gladiator* sensu STEPHENSON et CAMPBELL becomes *P. australiensis* STEPHENSON et COOK.

Indo-West Pacific from Japan to Australia, and to East Africa. From 5 to 100 m deep.

168. **Portunus (Xiphonectes) macrophthalmus** RATHBUN, 1906

(Pl. 4 C, D)

St. 8–1 ♂, 1 ♀, 1 juv. (NSMT-Cr. 5534). Breadth including lateral spines and length with frontal teeth, 16.7 and 8.0 mm in male.

This species included in the *P. longispinosus* complex was figured only by the original author and EDMONDSON (1951) and recorded by STEPHENSON and REES (1967), and STEPHENSON (1972 a). Some species are in reality so close to each other that it may be impossible to distinguish them without the useful key made by STEPHENSON (1972 b). This species is distinguished from *P. tenuicaudatus* STEPHENSON by the carapace less strongly embossed without spiniform elevations in the cardiac and mesobranchial regions and the lateral post-cardiac granular patch not distinctly recognizable, and from *P. iranjae* CROSNIER by the metagastric region with two tubercles instead of short ridges and also by the lateral postocardiac patch. The anterolateral border of the carapace is armed with four spines excluding the external orbital and long lateral spines. The chelipeds are of moderate length and robustness, differing from *P. longispinosus* sensu SAKAI (1939, 1976). In the male abdomen the crest of the third segment is distinctly notched in the middle, and the penultimate segment is also distinctly constricted. The male first pleopod is short, stout and strongly curved outward.

Chiefly West Pacific, hitherto recorded from the Hawaiian Islands, the Philippines, the Banda Sea, and otherwise known from Mauritius. From 2 to 100 m deep.

169. Portunus (Monomia) tenuipes DE HAAN, 1835

St. 8–1 juv. ♂ (NSMT-Cr. 5535).

Chiefly West Pacific, from the vicinity of Kii Peninsula through the Ryukyu Islands and the Philippines to Australia, and otherwise known from the Andamans. From coral reef to 45 m deep.

Family Xanthidae

Genus **Liomera** DANA, 1851

57. **Liomera caelata** (ODHNER, 1925)

St. 9–1 ♀ (NSMT-Cr. 5536).

Most characterized by the U-shaped protogastric region as represented by the original author, TAKEDA and KOYAMA (1974) and SAKAI (1976).

Ranging from Kii Peninsula through some localities in the West Pacific to Aldabra Island in the western Indian Ocean. From coral reef to 75 m deep.

Genus **Xanthias** RATHBUN, 1897

170. Xanthias cherbonnieri GUINOT, 1964

(Pl. 1 D)

St. 10–1 ♀ (NSMT-Cr. 5537). Breadth and length of carapace, 6.2 and 3.9 mm.

This specimen agrees well with the original figures, having the characteristic color pattern. The carapace, chelipeds and ambulatory legs are orange yellow, and each region of the carapace is connected by line of darker color, which is symmetrically disposed. The general shape of the carapace is somewhat similar to that of *X. maculatus* SAKAI from Japan. In the latter species, however, the carapace, chelipeds and ambulatory legs are provided with purplish blue spots fringed with brownish red, and the chelipeds and ambulatory legs are unarmed at all.

Hitherto known only from Aldabra Island in the western Indian Ocean, 20 m deep.

Genus **Paramedaeus** GUINOT, 1967

171. Paramedaeus noelensis (WARD, 1934)

St. 10–1 ♀ (NSMT-Cr. 5538).

Indo-West Pacific from Sagami Bay to Tahiti, and to Mauritius and the Red Sea. From rocky shore to 45 m deep.

Genus **Actumnus** DANA, 1851

172. Actumnus setosiareolatus sp. nov.

(Fig. 5 D, E; Pl. 5; Pl. 6 B)

St. 7–3 ♂♂ (holotype, NSMT-Cr. 5539, paratypes, NSMT-Cr. 5540).
Breadth and length of carapace, 9.0 and 6.9 mm in holotype, 9.5 and 7.1 mm, and 6.9 and 5.2 mm in paratypes.

These specimens are at first sight similar to *A. obesus* DANA, but surprisingly hairy, with a more or less spongy tomentum and several setae of various length on each areola. The carapace is deeply areolated, without granules, and the chelipeds and ambulatory legs are also prominently setose. All the specimens well agree with each other, and no remarkable differences are observed. The following is the description of the holotype.

"Carapace strongly vaulted fore and aft, and divided into areolae by wide and deep furrows, being entirely covered with more or less spongy tomentum; tomentum composed of stiff, erect, rather sparse brush-like setae, and more prominent on areolae than in furrows; each areola provided with several, or more, setae of various length; on denudation, areolae moderately convex, without granules. Detailed accounts of areolae are as follows. Frontal region not convex, with three long setae arranged transversely. Epigastric region moderately convex fore and aft as a whole, with a long and some longish setae. Protogastric region large, with ten, or more, setae of various length, being shallowly and incompletely subdivided into two for its about half by a median wide, longitudinal furrow or depression. Median gastric region barely subdivided into three, which are indicated by a tuft of some long or longish setae at each part; a longitudinal furrow from behind distinctly observable through a tomentum. Cardiac region transversely quadrilateral and not convex, with a tuft of some setae near each anterior angle, being surrounded by a deep furrow. Hepatic region convex as a whole, with a prominent tuft of longish setae, and isolated from protogastric and branchial regions and supraorbital and anterolateral borders. Branchial region subdivided into three by oblique furrows, but last one just lateral of cardiac region not distinct; the first prominent and deeply separated from last anterolateral tooth; posterior outer part of branchial region deeply concave dorsally for reception of last ambulatory leg.

"Front declivous and cut into two lobes by a median, narrow and deep notch; each lobe weakly arched laterally, being fringed with a long and some longish setae. Eyestalk covered with a tomentum and terminally provided with some longish setae. Supraorbital border also fringed with prominent setae, by which two deep notches are entirely disguised. Infraorbital border bears a small, but distinct notch near external orbital angle, being fringed with fine setae; its inner angle raised, but neither sharp nor convex ventrally. Inner angle of antennal basal segment just touched with ventral prolongation of front, orbital hiatus being thus occupied by second segment. Surfaces of pterygostomial region and third maxilliped nearly smooth, only with sparse short fine hairs.

"External orbital angle and three anterolateral teeth more or less tuberculated, each with a spinule at its tip; no accessory granules or spinules on slopes.

"Chelipeds heavy and unequal as usual. Merus hidden under carapace, only with setae on upper and distal borders; a subdistal and a distal spinule on upper border in smaller cheliped, but not in the larger. Outer surfaces of carpus and palm covered with a spongy tomentum implanted by stiff setae of various length; inner angle of carpus armed with a spiniform tubercle, and a smaller one at about distal one-third of inner upper border and

a similar one at antero-inner part of outer surface. Outer surface of palm also tomentose, with long stiff setae, for its proximal and distal upper parts; four equidistant, spiniform tubercles on upper border, and three smaller ones in a row outside of upper border; otherwise, outer surface entirely covered with conical granules of good size. Immovable finger short, with two median large and some proximal small teeth, its lower border weakly concave in outer view; a tuft of setae at median part of outer surface in larger chela, and an additional small one in smaller chela.

"Ambulatory legs comparatively stout and prominently hairy like carapace and chelipeds except for upper surfaces of meri of first three pairs. Carpus with a longitudinal furrow on its upper surface".

Genus **Planopilumnus** Balss, 1933

173. **Planopilumnus pygmaeus** sp. nov.

(Fig. 5 A-C; Pl. 6 C, D)

St. 11–2 ♂♂ (holotype and paratype, NSMT-Cr. 5541 and 5542). Breadth and length of carapace, 3.3 and 2.6 mm in both specimens.

These small, unusually hairy species are without doubt close to *P. penicillatus* (Gordon) from Hong Kong. In reality, a thick soft tomentum covering the carapace, chelipeds and ambulatory legs and the long club-shaped hairs arranged symmetrically on the carapace are shared with both species. In the species from Hong Kong, however, the median gastric region is indicated by a longitudinal strand ending in a diamond, a tomentum on each protogastric region forms a circle or ocellus, the areolation beneath the tomentum is only faintly indicated, the carapace is apparently broader with the nearly truncated second and third anterolateral teeth, the latter of which forms the lateral angle of the carapace, and the male first pleopod bears a strong subdistal spine. These differences warrant to describe the specimens at hand as new to science. Both specimens are really equal in size and in their hairiness and armature, without notable differences. The description is as follows.

"Carapace more or less quadrate, weakly convex fore and aft, and thickly covered with a soft tomentum which makes a labyrhynth appearance; most of regions traceable through a tomentum, and main regions with one or two club-shaped hairs; frontal regions of both sides transverse, with several long hairs in a transverse line; a small region behind frontal one connected with antero-inner part of protogastric region by a short strand of tomentum; protogastric region characteristically heart-shaped, subdivided into two by a longitudinal strand of tomentum, bearing a tuft of two or three hairs at its anterior median part; median gastric region gradually narrowed anteriorly as usual, and at posterior median part tomentum somewhat sparse; hepatic region rounded and isolated from protogastric and branchial regions and also from anterolateral teeth, being tipped by a long hair; branchial regions traceable, but each region not always very distinct, with a tuft of two long hairs near hepatic region; cardiac and intestinal regions not distinct; two long hairs at each antero-external angle of cardiac part.

"On denudation, surface uneven, with indication of regions, but without granules; hepatic region convex dorsally. Front declivous and separated into two convex lobes by a median narrow and deep incision; in frontal view lateral part of front deeply separated from long ventral prolongation of lateral end of front. Supraorbital border separated from front by a narrow dorsal sulcas; two interruptions distinct, and a median lobe thus formed lamellar and convex forward. External orbital angle conical in dorsal view. Infraorbital border serrated, fringed with longish setae and bears a small notch near external orbital angle; its inner angle only weakly convex. Antennal basal segment not quite reached ventral prolongation of front, orbital hiatus being thus occupied by second segment. Third

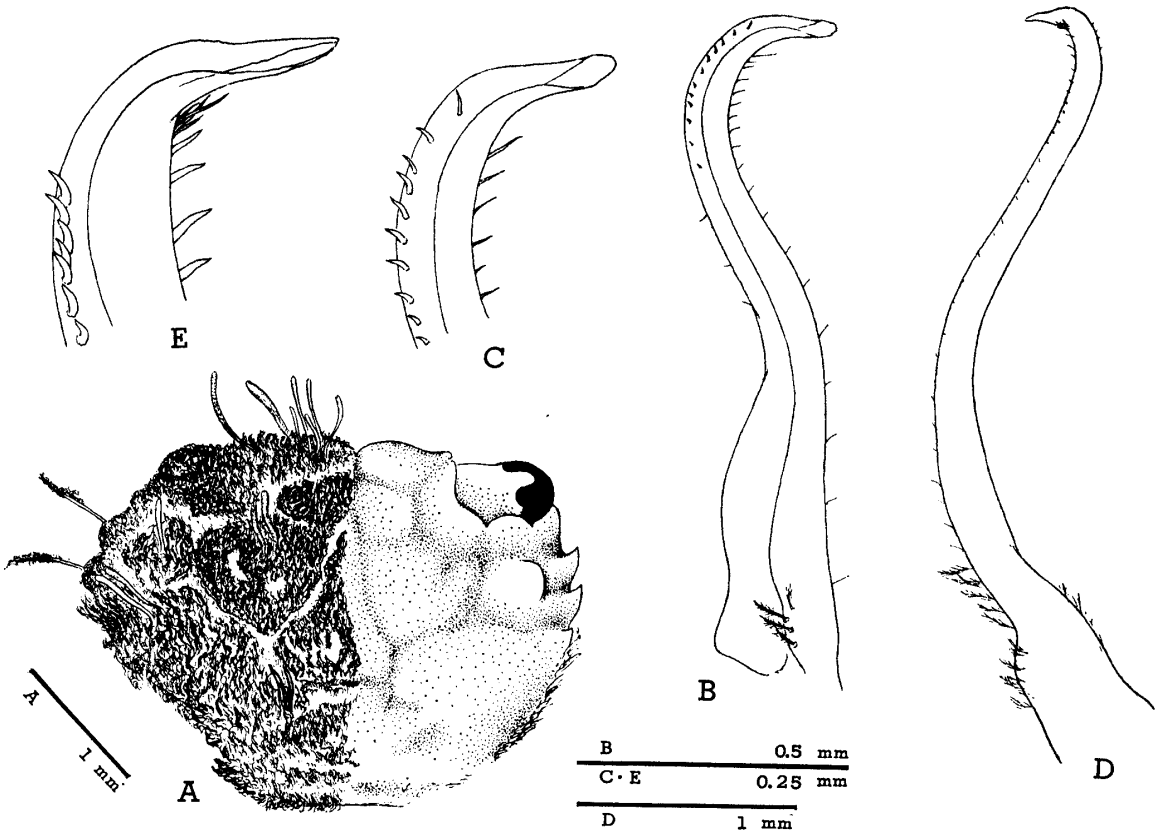

Fig. 5. A-C, *Planopilumnus pygmaeus* sp. nov., ♂, holotype, from St. 11. A, carapace in dorsal view. B and C, left first pleopod in abdominal view. D and E, *Actumnus setosiareolatus* sp. nov., ♂, holotype, from St. 7. Left first pleopod in sternal and abdominal view, respectively.

maxilliped with a short tomentum; marginal setae of ischium short and sparse; merus quadrate and moderately angulated antero-externally.

"Both chelipeds equal in size and shape, not so heavy, being thickly covered with a tomentum. Merus short and small; its poterior border sharp, with a distinct subdistal interruption, but unarmed. A tomentum of carpus makes an appearance of a labyrhynth; one or two long club-shaped hairs distally on outer surface; on denudation, its inner angle armed with a conical granule, and outer surface with sparse similar granules. Outer surface

of palm wholly covered with a thick tomentum and many long hairs, by which armature is entirely disguised; on denudation, some rows of pearly, or rather conical granules of good size. Fingers sharply toothed on cutting edges; upper border of proximal half of movable finger granulated and hairy. Ambulatory legs also prominently hairy; on denudation, anterior borders of meri sharp, but unarmed, and anterior border of first carpus with a few minute granules distally".

Family Goneplacidae

Genus **Heteroplax** STIMPSON, 1858

174. Heteroplax nitida MIERS, 1879

St. 8–4 juv. (NSMT-Cr. 5543). St. 16–3 juv. (NSMT-Cr. 5544).

Endemic to Japanese waters from Sagami Bay to the Korea Straits. From 30 to 85 m deep.

Genus **Mertonia** LAURIE, 1906

175. Mertonia lanka LAURIE, 1906

St. 4–1 ♀ (NSMT-Cr. 5545).

Known from Sagami Bay to Sri Lanka through the Gulf of Siam and the Malay Archipelago. This blind crab inhabits the sandy or shelly bottom of 10 to 55 m deep.

Family Pinnotheridae

Genus **Tetrias** RATHBUN, 1898

176. Tetrias fischeri (A. MILNE EDWARDS, 1867)

(Pl. 2 E, F)

St. 8–1 ♂ (NSMT-Cr. 5546). St. 17–1 ♂ (NSMT-Cr. 5547).

Though it is known that the contour of the carapace is somewhat different from each other in both sexes, in each male specimen at hand the carapace is distinctly quadrate, the anterolateral borders being developed and more or less rimmed.

Chiefly West Pacific from Japan to New Caledonia, and otherwise known from the Andamans. In Japan it has hitherto been known only from Sagami Bay. From coral reef to 10 m deep.

Family Ocypodidae

Genus **Macrophthalmus** DESMAREST, 1823

177. Macrophthalmus (Macrophthalmus) telescopicus (OWEN, 1839)

(Fig. 4 D)

St. 17–1 ♂, 2 ♀♀ (NSMT-Cr. 5548). Breadth and length of carapace, 10.4 and 6.8 mm in male, and 10.4 and 6.8 mm, 9.3 and 6.1 mm in females.

SERÈNE (1973) and BARNES (1976) revised the status of *M. telescopicus* (OWEN), *M. verreauxi* H. MILNE EDWARDS and *M. milloti* CROSNIER, which are extremely similar morphologically and regarded as the sibling species within an aggregate superspecies. Due to the important contributions by the two authors, however, the identification of each species is not so difficult on a combination of some characters. Most remarkable feature of this species is that the external orbital angle does not project beyond the following teeth, and another feature is the first male pleopod without a long terminal process. As the minor differences, though vary with size of the specimens, are the comparative development of the ocular peduncles, and the size of a tooth on the cutting edge of the movable finger. EDMONDSON (1962) gave an available description, and CROSNIER (1975) reported this species with fine figures.

As figured by BARNES (*op. cit.*), it is known from Hawaii, New Guinea, the Torres Straits, Fiji and probably some other regions in the West Pacific, and otherwise known from off Zanzibar and the Comores in the western Indian Ocean. Sublittoral from 1 to 55 m deep.

Discussion

It is a surprising fact that among 28 species recorded at present 5 are new to science and 9 are new to Japanese waters. Of the remaining 14 species only 2 species, *Libystes lepidus* of the Portunidae and *Liomera caerata* of the Xanthidae, have hitherto been known from the Ogasawara Islands. This collection by dredging dealt with here, therefore, presents an important contribution to the knowledge of crab fauna of the Ogasawara Islands.

Apart from the living specimens, fragments of the carapace and chelipeds were sorted out from the samples obtained. The results of identification are as follows.

St. 5: Leucosiidae—*Leucosia anatum* (HERBST) (sternum); Calappidae—*Calappa hepatica* (LINNAEUS) (movable finger); Xanthidae—*Actaea nodulosa* WHITE (right chela).

St. 7: Majidae—*Menaethius monoceros* (LATREILLE) (chela without movable finger, and merus of cheliped); Portunidae—*Portunus* sp. (damaged chela); Xanthidae—*Actaea nodulosa* WHITE (some damaged chelae), and an unidentified species (damaged chela).

St. 10: Xanthidae—*Actaea nodulosa* WHITE (right half of carapace, and palm).

St. 12: Raninidae—*Ranilia orientalis* SAKAI (anterolateral part of carapace;) Leucosiidae—*Praebebalia taeniata* sp. nov. (carapace with sternum); Portunidae—*Portunus* sp. (immovable finger); Xanthidae—*Actumnus intermedius* BALSS (cheliped without movable finger).

St. 13: Leucosiidae—*Ebalia hayamaensis* SAKAI (carapace).

St. 15: Leucosiidae—*Praebebalia taeniata* sp. nov. (carapace, and right chela without movable finger); Xanthidae—some unidentified species (some damaged chelae).

Among the species recorded above, **178. Ranilia orientalis** SAKAI, 1963, **179. Ebalia hayamaensis** SAKAI, 1963, and **180. Actumnus intermedius** BALSS, 1922 are new to crab fauna of the Ogasawara Islands. The carapace of *E. hayamaensis* preserved in good condition is 6.0 mm in its breadth and agrees well with the original description, though the dorsal tubercles seems to be generally larger and salient, with a deep groove between

Table 1. Number of specimens at each station.

Species \ Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Total
LEUCOSIIDAE																			
Ebalia humilis sp. nov.	—	—	—	—	—	—	—	4	—	—	—	—	—	—	1	—	—	—	5
Praebebalia taeniata sp. nov.	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Oreophorus latus (BORRADAILE)	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	2
Philyra syndactyla ORTMANN	—	1	—	—	—	—	—	—	16	—	—	—	—	—	—	—	—	—	17
MAJIDAE																			
Oncinopus neptunus ADAMS et WHITE	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Paratymolus bituberculatus HASWELL	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Achaeus fissifrons (HASWELL)	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	2
Aepinus indicus (ALCOCK)	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1
Hyastenus tenuicornis POCOCK	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	2
Eurynome orientalis SAKAI	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1
Schizophroida simodaensis SAKAI	—	—	—	—	—	—	—	—	4	1	—	—	—	—	—	—	—	—	5
Micippa parca ALCOCK	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
PARTHENOPIDAE																			
Aulacolambrus diacanthus (DE HAAN)	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Osachila expansa sp. nov.	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1
ATELECYCLIDAE																			
Kraussia integra (DE HAAN)	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1
PORTUNIDAE																			
Libystes lepidus MIYAKE et TAKEDA	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	3
Portunus haanii (STIMPSON)	—	2	—	—	—	—	5	3	1	—	—	—	—	—	—	—	—	—	11
macrophthalmus RATHBUN	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	3
tenuipes DE HAAN	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1
XANTHIDAE																			
Liomera caelata (ODHNER)	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Xanthias cherbonnieri GUINOT	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1
Paramedaeus noelensis (WARD)	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1
Actumnus setosiareolatus sp. nov.	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	3
Planopilumnus pygmaeus sp. nov.	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	2
GONEPLACIDAE																			
Heteroplax nitida MIERS	—	—	—	—	—	—	—	4	—	—	—	—	—	—	—	3	—	—	7
Mertonia lanka LAURIE	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
PINNOTHERIDAE																			
Tetrias fisheri (A. MILNE EDWARDS)	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	2
OCYPODIDAE																			
Macrophthalmus telescopicus (OWEN)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	3
Total	—	3	—	1	—	—	10	16	29	6	2	2	1	—	1	3	7	—	81

the hepatic and first lateral teeth. This species has hitherto been known only from the female holotype from Sagami Bay, 65 m deep. Two carapaces of *Praebebalia taeniata* are also preserved in good condition. They are slightly smaller than the holotype, but agree well with it, each leaving a characteristic color band which is faded so as to be yellowish. It is not always sure whether the short right cheliped without the movable finger is really refererd to the same species or not, even if it represents the typical *Ebalia*-type.

The numbers of the living specimens obtained are summarized in Table 1. Most of the species, 24 of 28 species, are represented only by 1 to 3 specimens. Most dominant species in number of individuals is *Philyra syndactyla* of the Leucosiidae, which is represented by 17 specimens from Station 2 and 9. The second species represented by 11 specimens from Station 2, 7, 8 and 9 is *Portunus haanii* of the Portunidae. This swimming crab may be one of the most important constituents of the sublittoral crabs at the sea in question. It is highly probably that the chelae abundantly found in the stomach contents of fishes reported by TAKEDA and KURATA (1976) are really referable to this species.

As a result, altogether 35 species including those distinguished from fragments but excluding two portunid and some xanthid crabs not identified to the species were recorded at present from 12 stations. In the previous dredging operation made by the author himself at 22 stations in the sea off Tanega-shima Island, southwest Japan, altogether 46 species of 10 families were recorded, as shortly reported by TAKEDA (1976). As for the hermit crabs and shrimps, 30 species of 12 families were recorded from off Tanega-shima Island, while only 13 species of 7 families were sorted out from the bottom samples obtained at the sea off Chichi-jima Island. Considering the species and individual numbers from the both regions, it is definitely said that the sea of the Ogasawara Islands is poor in the decapod crustacean fauna and represented by the oceanic character.

Although the accounts of the Tanega-shima Island species are now in preparation, only four species, viz., *Paratymolus bituberulatus* and *Aepinus indicus* of the Majidae, and *Heteroplax nitida* and *Mertonia lanka* of the Goneplacidae, are common to the Tanega-shima and Ogasawara crab faunae. It must be otherwise mentioned that two species, viz., *Oreophorus latus* of the Leucosiidae and *Oncinopus neptunus* of the Majidae, both of which are new to Japanese waters, were at present recorded from the Ryukyu Islands. Other than 5 new species, among the definitely identified 30 species the endemic elements with restricted distribution are *Ranilia orientalis* of the Raninidae, *Ebalia hayamaensis* and *Philyra syndactyla* of the Leucosiidae, *Schizophroida simodaensis* of the Majidae, *Actumnus intermedius* of the Xanthidae, and *Heteroplax nitida* of the Goneplacidae, and other 24 species are distinctly southern in their distribution pattern. It may be conclusively said that the shallow water crab fauna of the Ogasawara Islands is largely composed of the southern species and partly of the endemic elements of the Japanese mainland.

要　　約

1976年7月，国立科学博物館の「伊豆マリアナ島弧の自然史科学的総合研究」の一環として，父島西北部沖でドレッジによる底生生物調査が行なわれた．当初は父島周辺全域にわたる調査が計画されたが，

底質，費用などの制約により，結局18地点のみに限定された．カニ類は12地点より得られたが，それらは9科26属28種に同定され，そのうちには5新種，9日本新記録種が含まれている．上記の種以外に，得られたサンプル中より拾い出した甲殻，鉗脚の破片を同定した．しかし，オウギガニ科数種の細片については属の限定も不能で，またガザミ属の種の不完全な鉗脚も種の同定はできない．確実に同定し得た種は8属8種で，上記25種との共通種は St. 12 および15から得られた *Praebebalia taeniata* sp. nov. のみである．この1種を除いた7属7種を加えると，今回記録されたカニ類は結局31属35種ということになる．ほぼ同規模のドレッジ回数で得られた種子島沖のカニ類は38属46種であったから，父島沖のカニ類は種数についてかなり，また個体数においてはるかに少ない．この点に関しては，同時に得られたエビ，ヤドカリ類においてはより顕著で，これを考え合わせると，今回得られた十脚甲殻類が，小笠原海域が大洋的であるという特性を如実に示しているということができる．

28種中わずかに2種が，また破片から同定した8種中4種が従来小笠原から知られているのみで，調査がいかに不十分であったかが端的に示されている．合計35種中わずかに4種が種子島と，他の5種が琉球列島と共通である．日本の海域既記録21種中6種が日本の固有要素と考えられるもので，言い換えれば，5新種を除いた30種中24種が明らかに南方要素の強い種である．したがって，小笠原の浅海域のカニ類相は，強い南方要素の中に若干の日本中南部固有要素がはいって構成されていると推察することができる．今後の広域にわたる浅海調査の必要性が痛感されるが，これとともに，磯のカニ類の同定結果が示されれば，小笠原海域のカニ類相の特性がより明確になるものと思われる．

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Explanation of Plates

Plate 12

A, *Oncinopus neptunus* ADAMS et WHITE, ♂ from St. 9. Length of carapace, 7.2 mm. B, *Paratymolus bituberculatus* HASWELL, ♀ from St. 9. Length of carapace, 4.7 mm. C, *Oreophorus latus* (BORRADAILE), ovig. ♀ from St. 9. Breadth of carapace, 9.0 mm. D, *Xanthias cherbonnieri* GUINOT, ♀ from St. 10. Characteristic line faded out. Breadth of carapace, 6.2 mm.

Plate 13

A, *Philyra syndactyla* ORTMANN, ♂ from St. 9. Breadth of carapace, 8.0 mm. B, *Micippa parca* ALCOCK, ovig. ♀ from St. 9. Length of carapace in median line, 7.5 mm. C and D, *Hyastenus tenuicornis* POCOCK, ovig. ♀ from St. 10. Length of carapace in median line, 7.6 mm. E and F, *Tetrias fischeri* (A. MILNE EDWARDS), ♂ from St. 8. Breadth of carapace, 6.8 mm. G, *Aulacolambrus diacanthus* (DE HAAN), ♀ from St. 9. Length of carapace in median line, 10.7 mm.

Plate 14

A-C, *Osachila expansa* sp. nov., ♀, holotype, from St. 10. Breadth of carapace, 13.8 mm.

Plate 15

A and B, *Libystes lepidus* MIYAKE et TAKEDA, ♂ (A) and ovig. ♀ (B) from St. 17. Breadth of carapace, 9.5 mm in ♂ and 11.8 mm in ovig.♀. C and D, *Portunus macrophthalmus* RATHBUN, ♂ from St. 8. Breadth of carapace including lateral spines, 16.7 mm.

Plate 16

A and B, *Actumnus setosiareolatus* sp. nov., ♂♂, paratype (A) and holotype (B), from St. 7. Breadth of carapace, 6.9 mm in paratype and 9.0 mm in holotype.

Plate 17

A, *Osachila expansa* sp. nov., ♀, holotype, from St. 10. Breadth of carapace, 13.8 mm. B, *Actumnus setosiareolatus* sp. nov., ♂, paratype, from St. 7. Breadth of carapace, 9.5 mm. C and D, *Planopilumnus pygmaeus* sp. nov., ♂♂, holotype (C) and paratype (D), from St. 11. Breadth of carapace, 3.3 mm in both specimens.